



# Job Loss Analysis

ID No: 1466365 Status: Closed

Original Date: 18/May/2009  
Last Review Date: 18/May/2009

## Organization:

SBU: GLOBAL MANUFACTURING  
BU: ALL  
Work Type: Technical (Process Engineering)  
Title (Work Activity): Long Term Monitoring  
Site/Region:

Personal Protective Equipment (PPE)	Selected	Comments
Proper PPE per your Refinery Guidelines	Y	
Additional Task Specific PPE		
Other		

## Reviewers

Reviewers Name	Position	Date Approved
Johansen, Michelle L (MLMJ)	Manager	18/May/2009

## Development Team

Development Team Member Name	Primary Contact	Position
Okojie, Damilola (DOBT)	Y	Process Engineer
Stefanick, Brian (BSGX)	N	Process Engineer
Watson, Chris (CWDJ)	N	Process Engineer

## Job Steps

No	Job Steps	Potential Hazard	Critical Actions
1	Review unit columns	1. Loss of HVP due to drifting cut points 2. Tray damage/mechanical damage (property loss) 3. Loss of column efficiency increases energy use 4. Product integrity	1. Set baseline- Proll/Design and baseline gamma scan 2. Track column performance through dP/dT measurements as well as Refrac 3. Monitor long term reliability and process variables (stripping steam, overhead injection, etc) using PMO and CPV database 4. Monitor product specifications

2	Review unit heat exchangers	1. Loss of containment (high dP rupture, tube leak) 2. Energy use increases due to fouling  3. Cause plant limitations through fouling	1. Set baseline per design specifications 2. a) Track heat exchanger performance through U calc and fouling coefficient within PMO b) Use Hexmon if available c) Regular IR monitoring for fin fans 3. Track heat exchanger dP within PMO
3	Review unit furnaces	1. Energy use increase due to loss of efficiency 2. Loss of containment 3. Limits HVP due to fouling	1. Set baseline per design specifications 2. Review reliability parameters 3. a) Track performance through duty, efficiency, dP, skin temps, and O2 using trends in PMO b) Regular IR monitoring
4	Review unit catalyst	1. HVP due to loss of catalyst activity 2. Decreased run length  3. Lack of optimization	1. Monitor current operation by utilize radial dT, max CAT, axial dT, bed dP, reactor dP, skin TI's. 2. a) Monitor catalyst activity through CAT manager b) Monitor feed for poisons 3. Carry out test runs to establish optimum conditions where applicable
5	Review unit compressors/pumps	1. HVP loss due to decreased performance 2. Energy use increases due to loss of efficiency	1. Ensure pumps are operating on pump curve 2. Monitor compressor efficiency
6	Review Unit performance with Technology Licensor or BIN leader	1. Unit not being operated as per manufacturer's guidelines or most recent BIN practices. Potential damage to catalyst/equipment.	1. Review performance with Licensor or BIN leader on a quarterly basis.